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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/077,344	02/14/2002	Roger S. Twede	10012140-1	2488

7590 11/03/2004

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P.O. Box 272400  
Fort Collins, CO 80527-2400

[REDACTED] EXAMINER

STEVENS, ROBERT

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

2176

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/077,344	TWEDE ET AL.	
	<b>Examiner</b> Robert M Stevens	<b>Art Unit</b> 2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 14 February 2002.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-23 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-23 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 14 February 2002 is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>2/14/2002</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

1. Claims 1-23 are pending in Application No. 10/077,344, entitled "Method and System for Chained Format Translation", filed 2/14/2002 by Twede et al. Claims 1, 12 and 21 are independent.
2. The Office acknowledges Information Disclosure Statement filed on 2/14/2002.

*Priority*

3. Applicant makes no claim to either domestic or foreign priority.

*Drawings*

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 3 #T3. Please correct all such omissions.
5. To facilitate understanding of the drawings, the Office recommends that suitable legends be placed in Fig. 1 and 2 (see 37 CFR 1.84(o)).
6. To facilitate understanding of the drawings, the Office also recommends that lead lines in the form of arrows be placed in Fig. 1 and 2 to avoid confusion with the lines that interconnect structural elements.

7. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c) and 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

*Specification*

8. The disclosure is objected to because of the following informalities:

A. Please correct all spelling/grammar/etc. errors throughout the specification (including the abstract/drawings/claims), such as last sentence on p. 11 "to get access the" and claim 1 and 21 limitations ending in commas.  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

9. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

10. **Claims 1-23 rejected under 35 U.S.C. 112, first paragraph,** as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

**Regarding independent claims 1, 12 and 21,** there does not appear to be any implementation details for performing a multi-stage file format conversion. Refer to claim limitations: claim 1 (lines 10, 13 and 14 regarding “subsequent translator”), claim 12 (lines 5-17 regarding “conversion sequence” and subsequent translator”), and claim 24 (lines 11-19 regarding “conversion sequence” and subsequent translator”). Applicant seems to be claiming the inefficiency of converting to at least one undesired intermediate format before converting to the desired end result, rather than directly converting to the desired format, as taught in the art.

**Claims 2-11, 13-20 and 22-23** are dependent upon claims 1, 12 and 21, respectively, and therefore likewise rejected.

11. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. **Claims 1-23 are rejected under 35 U.S.C. 112, second paragraph,** as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

**In regards to the independent claims 1, 12 and 21,** these claims all recite the limitation “at least one subsequent translator”. Refer to: claim 1 (lines 10, 13 and 14), claim 12 (lines 6, 10 and 14), and claim 24 (lines 12 and 18). Applicant seems to be claiming the inefficiency of converting to at least one undesired intermediate format before converting to the desired end result, rather than directly converting to the desired format, as taught in the art. As such, the scope of these claims is vague and indefinite.

**Claims 2-11, 13-20 and 22-23** are dependent upon claims 1, 12 and 21, respectively, and therefore likewise rejected.

#### *Claim Rejections - 35 USC § 103*

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. **Claims 1-23 are rejected under 35 U.S.C. 103(a)** as being unpatentable over Chang et al. (US Patent Application Publication No. 2002/0097419, provisionally filed Jan. 19, 2001, hereafter referred to as “Chang”) in view of Jacobs (US Patent No. 6,043,898, filed May 31, 1996 and issued Mar. 28, 2000, hereafter referred to as “Jacobs”) and further in view of Thomas Merz (“Ghostscript User Manual”, [adapted from PostScript and Acrobat/PDF: Applications, Troubleshooting, and Cross-Platform Publishing, Springer Verlag, New York, ISBN 3-540-60854-0, Sep. 1996], © 1996, hereafter referred to as “Merz”).

**Regarding independent claim 1**, Chang discloses:

*A method of converting a datafile having a first format into a second format for printing, comprising:*

*conveying the datafile in a first format to a printer, said printer for receiving datafiles in a first format ([0081]) and printing datafiles from a second format, said printer including a controller; (Fig. 2A #230 and [0085] disclosing that an output device can be a printer)*

*activating said controller for translating said datafile into said second format; (Fig. 2A #230)*

*accessing a registry database over a network ([0065] re: output device profile and network node storage [noting that output device profile = printer profile]) using said controller for selecting a translator; (Fig. 2A #230)*

*... , ---;*

*... , ---;*

*converting said datafile to said second format; ([0143])*

*conveying said datafile in said second format to said printer; ([0121]) and printing said datafile from said second format. (Abstract re: “rendering”, in the context of [0085] re: output device is a printer)*

However, Chang does not explicitly disclose:

*selecting a translator for a conversion sequence, ---*

*conveying at least a first job specification command to at least one translator in said conversion sequence, ---*

Jacobs, though, discloses:

*selecting a translator for a conversion sequence (Fig. 3A #304), - - -  
conveying at least a first job specification command to at least one  
translator in said conversion sequence (Fig. 3A #306), - - -*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Furthermore, Chang does not explicitly disclose:

*... , said conversion sequence including an initial translator and at least  
one subsequent translator  
... , said initial translator in the sequence accesses said datafile in said  
first format and said at least one subsequent translator in said conversion  
sequence directly accessing an output of said initial translator*

Merz, though, discloses:

*... , said conversion sequence including an initial translator and at least  
one subsequent translator (p. 23 section entitled “Converting PDF to PostScript”)  
... , said initial translator in the sequence accesses said datafile in said  
first format and said at least one subsequent translator in said conversion  
sequence directly accessing an output of said initial translator (p. 22 section  
entitled “Converting PostScript to Raster Graphics Formats”, which [in  
combination with p. 23] teaches a resultant conversion of PDF to Raster Graphics  
Formats via a PostScript intermediate format)*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Merz for the benefit of Chang in view of Jacobs, because to do so

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would allow a user to convert among file formats as taught by Merz on p. 3 in the section labeled "Utilities and converters". These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Because these references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Chang, Jacobs and Merz.

**Regarding claim 2**, which is dependent upon claim 1, Chang further discloses:

*where said printer further comprises a web server. ([0134], re: output server)*

**Regarding claim 3**, which is dependent upon claim 2, Chang further discloses:

*wherein said at least a first job specification command is conveyed using said web server. ([0134], re: application software installed in a server)*

**Regarding claim 4**, which is dependent upon claim 1, Chang further discloses:

*wherein said at least first job specification command comprises a uniform resource locator (URL). ([0079] references digital documents, such as HTML. Note that HTML documents may be referenced via URL, as evidenced by the definition of "URL" on p. 542 of the Microsoft Computer Dictionary, 5<sup>th</sup> Edition, [Microsoft Press, Redmond, WA, ISBN 0-7356-1495-4, © 2002, p. 542])*

**Regarding claim 5**, which is dependent upon claim 1, claim 1 has been previously addressed.

However, Chang does not explicitly disclose:

*wherein said at least first job specification command is conveyed to a last of said subsequent translators in said conversion sequence.*

Jacobs, though, discloses:

*wherein said at least first job specification command is conveyed to a last of said subsequent translators in said conversion sequence. (Fig. 3A #306 and Fig. 2 #44 re: "Transistor n")*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang and Merz, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

**Regarding claim 6**, which is dependent upon claim 5, claim 5 has been previously addressed.

However, Chang does not explicitly disclose:

*wherein said at least a first job specification command activates said last subsequent translator to access data directly from said prior translator in said conversion sequence.*

Jacobs, though, discloses:

*wherein said at least a first job specification command activates said last subsequent translator to access data directly from said prior translator in said conversion sequence. (Fig. 3A #306 and Fig. 2 #44 re: "Transistor n")*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang and Merz, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract.

These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

**Regarding claim 7**, which is dependent upon claim 1, claim 1 has been previously addressed.

However, Chang does not explicitly disclose:

*wherein said at least first job specification command is conveyed to said initial translator.*

Jacobs, though, discloses:

*wherein said at least first job specification command is conveyed to said initial translator. (Fig. 3A #306 and Fig. 2 #44 re: "Transistor n")*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang and Merz, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract.

These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

**Regarding claim 8**, which is dependent upon claim 7, claim 7 has been previously addressed.

However, Chang does not explicitly disclose:

*wherein said at least first job specification command activates said initial translator to directly convey output data to said at least one subsequent translator.*

Jacobs, though, discloses:

*wherein said at least first job specification command activates said initial translator to directly convey output data to said at least one subsequent translator. (Fig. 3A #306 and Fig. 2 #44 re: "Transistor n")*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang and Merz, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

**Regarding claim 9**, which is dependent upon claim 1, Chang further discloses:

*wherein said registry database is contained on a computer that is geographically separate from said printer, and accessing said registry is accomplished over a network connection. ([0065], re: network node and network connection)*

**Regarding claim 10**, which is dependent upon claim 1, claim 1 has been previously addressed.

However, Chang does not explicitly disclose:

*where said initial translator and said at least one subsequent translator are located on geographically separate computers that are accessible to one another and to said printer over a network.*

Jacobs, though, discloses:

*where said initial translator and said at least one subsequent translator are located on geographically separate computers that are accessible to one*

*another and to said printer over a network.* (Fig. 2 and discussion at col. 4 lines 3-11 re: networked servers [which are comprised of translators show in Fig. 2 #44])

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang and Merz, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

**Regarding claim 11**, which is dependent upon claim 10, Chang further discloses:

*wherein said network includes the internet.* (Fig. 2A/2B showing comms link 240 between Information apparatus and output device and [0097] discussing Web terminals and Internet appliances)

**Regarding independent claim 12**, Chang discloses:

*A method of linking format conversion programs to convert a datafile from an initial format into a desired final format, comprising:*

*accessing a registry database containing information on translators to determine what translators are available over a network; ([0065] re: output device profile and network node storage [noting that output device profile = printer profile])*

... ;  
... ;  
- - - .

However, Chang does not explicitly disclose:

*selecting among said translators to design a conversion sequence, said conversion sequence including an initial translator and at least one subsequent translator;*

*conveying at least a first job specification command to at least one translator in said conversion sequence to activate to initiate said conversion*

*sequence, such that said initial translator in said conversion sequence accesses said datafile in said initial format and said at least one subsequent translator in said conversion sequence directly accesses an out-put of said initial translator;*

Jacobs, though, discloses:

*selecting among said translators to design a conversion sequence, said conversion sequence including an initial translator and at least one subsequent translator; (Fig. 3A #304)*

*conveying at least a first job specification command to at least one translator in said conversion sequence to activate to initiate said conversion sequence, such that said initial translator in said conversion sequence accesses said datafile in said initial format (Fig. 3A #306) and said at least one subsequent translator in said conversion sequence directly accesses an out-put of said initial translator; (Fig. 3A #306)*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Furthermore, Chang does not explicitly disclose:

*converting said datafile to said desired final format as said initial translator in said conversion sequence accesses said initial format datafile and converts it into said output in another format, and each said subsequent translator in said conversion sequence directly accesses said output of said prior translator in said conversion sequence and converts it into a subsequent format until said datafile is converted into said desired final format.*

Merz, though, discloses:

*converting said datafile to said desired final format as said initial translator in said conversion sequence accesses said initial format datafile and*

*converts it into said output in another format, and each said subsequent translator in said conversion sequence directly accesses said output of said prior translator in said conversion sequence and converts it into a subsequent format until said datafile is converted into said desired final format.* (p. 23 section entitled “Converting PDF to PostScript” and p. 22 section entitled “Converting PostScript to Raster Graphics Formats”, which [in combination with p. 23] teaches a resultant conversion of PDF to Raster Graphics Formats via a PostScript intermediate format)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Merz for the benefit of Chang in view of Jacobs, because to do so would allow a user to convert among file formats as taught by Merz on p. 3 in the section labeled “Utilities and converters”. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Because these references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Chang, Jacobs and Merz.

**Claim 13**, which is dependent upon claim 12, is substantially similar to claim 4 and therefore likewise rejected.

**Claim 14**, which is dependent upon claim 12, is substantially similar to claim 5 and therefore likewise rejected.

**Claim 15**, which is dependent upon claim 14, is substantially similar to claim 6 and therefore likewise rejected.

**Claim 16**, which is dependent upon claim 12, is substantially similar to claim 7 and therefore likewise rejected.

**Claim 17**, which is dependent upon claim 16, is substantially similar to claim 8 and therefore likewise rejected.

**Claim 18**, which is dependent upon claim 12, is substantially similar to claim 9 and therefore likewise rejected.

**Claim 19**, which is dependent upon claim 12, is substantially similar to claim 10 and therefore likewise rejected.

**Claim 20**, which is dependent upon claim 19, is substantially similar to claim 11 and therefore likewise rejected.

**Regarding independent claim 21**, Chang discloses:

*A system for printing a datafile in an unsupported initial format, comprising:  
a registry database containing information concerning a selection of  
datafile format translators that are available using a network; ([0065] re: output  
device profile and network node storage [noting that output device profile =  
printer profile])*

*a printer attached to said network (Fig. 2B #250 and #240, in the context  
of [0085] re: output device is a printer), said printer configured to receive  
datafiles in a number of unsupported initial formats and to print datafiles from an  
appropriate final format (Abstract re: “rendering”, in the context of [0085] re:  
output device is a printer), said printer further comprising a controller (Fig. 4A  
#410);*

*said controller (Fig. 4A #410) configured to initiate a translation of said  
datafile from said unsupported initial format into said appropriate final format by  
accessing said registry database to determine an availability of said selection of  
translators over said network ([0065] re: output device profile and network node  
storage [noting that output device profile = printer profile]) and - - - ;*

*said printer further configured (Fig. 4A #400) ... , - - - .*

However, Chang does not explicitly disclose:

*to convey at least a first job specification command to at least one  
translator in said conversion sequence to activate to initiate said conversion  
sequence, - - -*

Jacobs, though, discloses:

*to convey at least a first job specification command to at least one translator in said conversion sequence to activate to initiate said conversion sequence (Fig. 3A #306), - - -*

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Jacobs for the benefit of Chang, because to do so would allow for the concurrent processing of printer requests as taught by Jacobs on p. 259 in the Abstract. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Furthermore, Chang does not explicitly disclose:

*designing a conversion sequence from said selection including an initial translator and at least one subsequent translator to perform the conversion; . . . , said initial translator in the sequence accesses said datafile in said first format and said at least one subsequent translator in said conversion sequence directly accessing an output of said initial translator*

Merz, though, discloses:

*designing a conversion sequence from said selection including an initial translator and at least one subsequent translator to perform the conversion (p. 23 section entitled "Converting PDF to PostScript" and p. 22 section entitled "Converting PostScript to Raster Graphics Formats", which [in combination with p. 23] teaches a resultant conversion of PDF to Raster Graphics Formats via a PostScript intermediate format)*

*. . . , such that an initial translator in said conversion sequence accesses said datafile in said unsupported initial format and at least one subsequent translator in said conversion sequence directly accesses an output of said initial translator to convert said datafile in an unsupported into a subsequent format until said datafile is converted into said appropriate final format allowing the datafile to be printed (p. 23 section entitled "Converting PDF to PostScript" and*

p. 22 section entitled “Converting PostScript to Raster Graphics Formats”, which [in combination with p. 23] teaches a resultant conversion of PDF to Raster Graphics Formats via a PostScript intermediate format)

It would have been obvious to one of ordinary skill in the art at the time of the invention to apply the teachings of Merz for the benefit of Chang in view of Jacobs, because to do so would allow a user to convert among file formats as taught by Merz on p. 3 in the section labeled “Utilities and converters”. These references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing.

Because these references were all applicable to the same field of endeavor, i.e., document format conversion to facilitate printing, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Chang, Jacobs and Merz.

**Claim 22**, which is dependent upon claim 21, is substantially similar to claim 9 and therefore likewise rejected.

**Claim 23**, which is dependent upon claim 22, is substantially similar to claim 11 and therefore likewise rejected.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

### ***Non-patent Literature***

Bell, Gordon, “A Personal Digital Store”, Communications of the ACM, Vol. 44 No. 1, Jan. 2001, pp. 86-91.

Microsoft Computer Dictionary, 5<sup>th</sup> Edition, Microsoft Press, Redmond, WA, ISBN 0-7356-1495-4, © 2002, p. 542.

***US Patent Application Publications***

Nakaoka et al	US2002/0186408
Chang et al	US2002/0099884
Brossman et al	US2001/0043352
Davison	US2003/0101238
Smith	US2004/0205647

***US Patents***

Chiu et al	6,035,121
Esquibel et al	6,662,186
Laverty et al	6,396,593
Adamske et al	6,615,234
Orton	6,590,674
Kyle	6,141,681
Tolfa	6,195,664
Yokoyama	6,166,826
Cyr et al	5,819,014
Ohnishi et al	5,655,152
Shaw et al	5,602,974

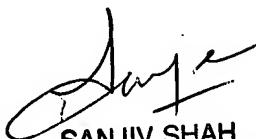
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert M Stevens whose telephone number is (571) 272-4102. The examiner can normally be reached on M-F 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on (571) 272-4090. The current fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Additionally, the main number for Technology Center 2100 is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Robert M. Stevens  
Art Unit 2176  
Date: October 29, 2004

rms



SANJIV SHAH  
PRIMARY EXAMINER